

**UTAH STATE IMPLEMENTATION PLAN**

**SECTION X**

**VEHICLE INSPECTION  
AND MAINTENANCE PROGRAM**

**PART B**

**DAVIS COUNTY**

Adopted by the Utah Air Quality Board  
February 5, 1997

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**UTAH STATE IMPLEMENTATION PLAN**  
**SECTION X**  
**AUTOMOTIVE INSPECTION AND MAINTENANCE (I/M) PROGRAM**  
**PART B**  
**DAVIS COUNTY**

**1. I/M Performance Standard**

*Federal requirements* EPA's I/M regulation, 40 CFR Part 51, Inspection and Maintenance Program Requirements, Final Rule November 5, 1992, specifies a model Basic I/M program. Utah is required by Section 182 of the Clean Air Act to implement an I/M program in Davis County that is at least as effective as the EPA's Basic Performance Standard. The Basic I/M performance standard is specified in 40 CFR 51.352. Regulators are not required to implement the exact elements specified in EPA's model I/M programs. EPA's I/M regulations instead require a performance demonstration that local I/M programs result in automotive emissions equal to or less than predicted for the EPA model I/M program. State and local governments may choose options best suited for their area to meet the performance standard.

*Basic I/M program performance standard* Davis County's Basic I/M program exceeds the Basic I/M performance standard for all pollutants, although the EPA only requires the demonstration for each pollutant which caused an area to be subject to an I/M program. Davis County is in a moderate ozone non-attainment area. Achieving EPA's Basic I/M performance standard in Davis County will result in no increase in oxides of nitrogen (NO<sub>x</sub>) as a result of the Basic I/M program.

*Basic I/M Program MOBILE modeling* The performance standard demonstration made use of EPA's MOBILE5.a model. The MOBILE5.a model is able to calculate emission factors, grams of a particular pollutant per vehicle mile traveled across the fleet in an area (G/VMT), given information about the fleet, climate, fuel characteristics, and I/M programs in a local area. MOBILE5.a was used for the Basic I/M performance standard demonstration analysis. The MOBILE5.a input and output files for the modeling performed to evaluate the emission reduction benefits for Davis County's Basic I/M program are found in the Appendices, Section X, Part B.<sup>1</sup> Table X.B.1 summarizes the attainment milestones, the applicable performance standard and program target emission factors for volatile organic compounds (VOC), carbon monoxide (CO) and NO<sub>x</sub> for the Basic I/M program. The modeling demonstrates compliance with the federal Basic I/M performance standard as required by the ozone maintenance plan until the DC98 enhanced I/M program is implemented.

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<sup>1</sup> A list of Appendices follows the Table of Contents.

DAVIS COUNTY BASIC I/M PERFORMANCE STANDARD ANALYSIS SUMMARY  
(Basic I/M Program effective until replaced by DC98 I/M program no later than January 1, 1998)

pollutant	program modeled	emission factors in grams/mile			
		January 1	1997	2000	2003
VOC	Basic Performance Standard		2.70	2.47	2.30
	Basic Program Target		2.64	2.40	2.22
NO <sub>x</sub>	No I/M or ATP Program		2.60	2.38	2.23
	Basic Program Target		2.53	2.32	2.17
		January 1	1996	2000	
CO	Basic Performance Standard		22.85	18.69	
	Basic Program Target		21.02	17.92	

TABLE X.B.1

*Davis County Enhanced (DC98) I/M Program Performance Standard* The Air Quality Board adopted an ozone maintenance plan for Salt Lake and Davis Counties on November 5, 1993. The plan was reorganized and adopted on January 5, 1995. Revisions to the ozone maintenance plan were adopted by the Board on June 5, 1996, and January 7, 1997. The ozone maintenance plan requires implementation of an enhanced I/M program no later than January 1, 1998. The ozone maintenance plan established a performance standard for both counties that is more stringent than the federal Basic I/M performance standard. Parts A and B of section X, together with referenced appendices, demonstrates compliance with the enhanced I/M program performance standard for Davis County as specified in Section IX.D.2.g of the Ozone SIP and herein after referenced as DC98.

*DC98 MOBILE modeling* The performance standard demonstration is made by use of the most recent release of EPA's MOBILE model. The MOBILE5.a.h model is able to calculate emission factors, grams of a particular pollutant per vehicle mile traveled across the fleet in an area (G/VMT), given information about the fleet, climate, fuel characteristics, and I/M programs in a local area. MOBILE5.a.h was used for the DC98 performance standard demonstration analysis. The performance demonstration summary and Mobile 5.a.h input and output files for the performance demonstration analysis for the DC98 I/M program are found in Appendices for Section X, Part B. Table X.B.2. summarizes the modeled VOC, CO and NO<sub>x</sub> emission factors specified in Section IX.D.2.g of the ozone maintenance plan for the DC98 I/M program. The modeling demonstrates compliance with both the federal Basic I/M performance standard and the ozone maintenance plan Basic I/M performance standard.

DAVIS COUNTY DC98 I/M PERFORMANCE STANDARD ANALYSIS SUMMARY  
(DC98 I/M Program to replace the Basic I/M program no later than January 1, 1998)

pollutant	program modeled	emission factors in grams/mile				
		July 1	1998	2000	2003	2006
VOC	Basic Performance Standard			2.47	2.30	
	DC98 Performance Standard		1.95	1.71	1.55	1.33
	DC98 Program Target		1.95	1.71	1.55	1.33
NO <sub>x</sub>	NO I/M or ATP			2.38	2.23	
	DC98 Performance Standard		2.25	2.04	1.94	1.89
	DC98 Program Target		2.25	2.04	1.94	1.89
CO	Basic Performance Standard			18.69		
	DC98 Performance Standard		14.44	11.63	9.72	8.60
	DC98 Program Target		14.44	11.63	9.72	8.60

TABLE X.B.2

The PM<sub>10</sub> contingency plan adopted on July 1, 1994, requires implementation of an enhanced I/M program in Davis and Salt Lake Counties if Salt Lake County violates the PM<sub>10</sub> standard. Commitments from the Davis County Commissioners to implement an enhanced I/M program, as required by the SIP, are in Section IX, Part A, Appendices. The enhanced I/M program can be revised in the future by the Davis County Commissioners as long as the revised program meets all the applicable performance standards documented in the Ozone Maintenance Plan, Section IX.D.2.

## 2. Network type

*Basic I/M Program* The Davis County Basic I/M program is a decentralized, test-and-repair network consisting of approximately 93 stations using a two-speed idle test and anti-tampering inspection. Letters of opinion from the Utah Attorney General's Office and the Davis County Attorney's office verifying authority to implement the specified Basic I/M program network in Davis County are provided in Section X, Part A, Appendices.

*DC98 Enhanced I/M Program* Beginning no later than January 1, 1998, Davis County will implement the DC98 I/M program. The hybrid DC98 network will include a centralized, test-only component where the applicable fraction of the vehicle fleet will be subject to an IM240 test. The hybrid program will include an enhanced Basic I/M program component using UTAH91 analyzers at decentralized, test-and-repair facilities to test the remainder of the vehicle fleet. The enhanced UTAH91 program includes NO<sub>x</sub> emission control device functional tests, a gas gap pressure test, more efficient data recovery and analysis, and more audit emphasis on effectiveness of repairs. A training and certification program for technicians and a rating system to grade the capability of a facility to repair failed vehicles will be established across the entire DC98 network. Letters of opinion from the Utah Attorney General's Office and the Davis County Attorney's office verifying



authority to implement the specified DC98 I/M program network in the subject area are provided in Section X, Part B, Appendices, along with the Davis County I/M ordinance.

PROJECTED NUMBER AND TYPES OF I/M STATIONS IN DAVIS COUNTY

Effective Date	Program	Number
Prior to Jan 1, 1998	Basic	93
January 1, 1998	Decentralized DC98	75
January 1, 1998	Centralized DC98	1 (5 lanes)

TABLE X.B.3

### **3. Tools and resources**

*Funding mechanisms* Davis County's I/M program is funded through two mechanisms. At the time of registration, a fee of \$1 per car is collected by the Davis County Tax Assessor's Office or Utah Tax Commission Motor Vehicle Customer Service Division. Davis County sells I/M inspection certificates to inspection stations for \$2.25 each. The fees are dedicated to I/M needs. Furthermore, Davis County charges fees for various permitting activities. A fee schedule can be found in the appendices to Davis County's I/M ordinance, which is found in the Appendices for Section X, Part B. The fee schedule is placed into an appendix so that it can be revised quickly, as needed, to support the program without taking the entire ordinance through rulemaking. Davis County began its I/M program in 1984. Past performance has demonstrated that adequate funding of Davis County's I/M program can be maintained.

*Funding requirements* Davis County will continue to allocate funding as needed to comply with the relevant requirements specified in Utah's SIP; Utah statutes; Davis County ordinances and policies; and the federal I/M program regulation. Program budgets will include funding for resources necessary to adequately: manage the program; conduct covert and overt audits, including repairs as specified in the I/M Program quality assurance section; assist and educate inspectors, station owners, and the public; manage, analyze, and report data; ensure compliance with the program by inspectors, stations, and vehicle owners; and evaluate and upgrade the programs. Budgets and descriptions of personnel resources, facilities, and equipment for Davis County's I/M program are provided in Section X, Part B, Appendices.

### **4. Test convenience**

*Basic I/M program* There are approximately 100 permitted Basic I/M stations currently available within Davis County. Specific operating hours for the Basic I/M stations are not specified. Some stations that test and service only one type of vehicle are permitted. It may not be practical to have a sports car tested at a heavy duty truck repair facility. To date, no complaints have been

received about test inconvenience. Also, there are government and private fleet permitted stations that are not open to the public.

*DC98 I/M program* It is anticipated that only about 80% of the existing decentralized, Basic I/M stations will convert over to Davis County's DC98 program starting on January 1, 1998. Davis County will have at least one centralized, IM240 test station ready by January 1, 1998. Davis County has determined that the IM240 facility can handle up to 50,000 vehicles per year. In its first year, Davis County projects about 45,000 vehicles being tested in its IM240 facility. The IM240 facility operating hours are planned to run from Monday through Friday 8 AM to 6 PM, and on Saturday from 9 AM to 4 PM. The operational hours may be extended, if necessary. The IM240 facility is located near the geographical center of the county and no further than 13 miles from any residence in the county. The facility is adjacent to the freeway. The location was chosen with consumer convenience as the primary consideration.

## **5. Vehicle Coverage**

*Subject fleet* The Davis County I/M ordinance specifies that all model year 1968 and newer model year light duty vehicles, light duty trucks, and heavy duty trucks registered or principally-operated in Davis County are subject to the I/M programs except for exempt vehicles. Vehicle coverage is discussed in greater detail in the Davis County I/M ordinance provided in Section X, Part B, Appendices. Statistics for the subject vehicle fleet by vehicle type, model year, vehicle class, and weight class are included in Section X, Part B, Appendices. The data was compiled for the 1990 emissions inventory and has been subjected to a comprehensive quality assurance effort. Vehicles older than model year 1986 will be tested only at the decentralized Basic I/M stations. Beginning on January 1, 1998, vehicles of model year 1986 and newer will be periodically tested at the DC98 centralized, 5-lane, IM240 facility. Each year, vehicles for three model years will be selected for inspection at the test-only IM240 facility. If required to meet the ozone performance standard, additional model years may be added. OBD II testing will be performed as part of the DC98 program and as described in the Davis County ordinance, Section X, Part B, Appendices.

*Alternative fuels* Vehicles operated on alternative fuels such as propane, alcohol, and natural gas are also subject to the program. Dual-fueled vehicles are tested twice, once on each fuel.

*Government fleet* Section 41-6-163.6(1)(b) requires that all vehicles owned or operated in Davis County by federal, state, or local government entities comply with the Davis County I/M program. Under its Basic I/M program, Davis County permits government stations and inspectors to perform I/M inspections. The I/M station and inspector permit requirements are the same for government fleets as for private or commercial stations and inspectors. Some government agencies may choose to have their vehicles inspected at a decentralized I/M station. Davis County requires submittal of a list of subject vehicles and a certificate of compliance or waiver for each vehicle every year. See Section X, Part B, Appendices, for the waiver policy developed by Davis County. However, beginning on January 1, 1998, if the government vehicle is of a model year subject to centralized, IM240 testing, it will have to be tested at a Davis County approved IM240 test facility.

*Vehicles owned by students and federal employees* Section 41-6-163.3(5) requires universities and colleges located in Utah's I/M areas to require proof of compliance with the I/M program for vehicles which are permitted to park on campus regardless of where the vehicle is registered. Vehicles operated by federal employees and operated on a federal installation located within an I/M program area are also subject to the I/M program regardless of where they are registered. Proof of compliance consists of a current vehicle registration in an I/M program area or an I/M certificate of compliance or waiver, or evidence of exempt vehicle status as specified in in this section.

*Farm truck exemption* Eligibility for the farm truck exemption from the I/M programs is specified in Section 41-6-163.6(4) and must be verified in writing by the Davis County I/M program staff. The owner must sign an affidavit on Utah State Tax Commission form TC-838 that vehicle use will be limited to agricultural activities. A copy of the form is provided in Appendices of Section X, Part A. Due to past abuses by vehicle owners, the counties strictly limit use of the farm truck exemption.

*Diesel vehicles* Diesel vehicles are no longer exempt from I/M. Davis County implemented its diesel I/M program in 1994.

*New vehicle exemption* Proof that a vehicle is new and being registered for the first time is established by presentation of a Manufacturer's Statement of Origin (MSO) at the time of registration.

*Out-of-state exemption* Vehicles registered in Davis County but operated out-of-state are eligible for an extension. The owner must complete Utah State Tax Commission form TC-810 in order to be registered in Davis County. The owner must explain why the vehicle is unavailable for inspection. Common situations include Davis County residents who are military personnel stationed outside of the state, students attending institutions of higher education elsewhere, and people serving missions. If the temporary address of the owner is located within another I/M program area listed on the back of the form, the owner must submit proof of compliance with that I/M program at the time of, and as a condition precedent to, registration or renewal of registration. The vehicle owner must identify their anticipated date of return to the state and is required to have the vehicle inspected within 10 days after the vehicle is back in Davis County. The Davis County maintains a record of such exemptions and requires submission of an I/M inspection certificate or waiver at the indicated time. A copy of the Tax Commission form is found in Section X, Part A, Appendices and a sample of the letter Davis County sends to vehicle owners who have not complied after the return date is provided in Section X, Part A, Appendices.

*Exempt vehicle statistics* Motorcycles, farm vehicles, and new vehicles being registered for the first time are exempt. Statistics for exempt vehicles are provided in Table X.B.4.

VEHICLES EXEMPT FROM I/M PROGRAM REQUIREMENTS IN DAVIS COUNTY  
(provided by Utah Motor Vehicle Customer Service Division January 1995)

motorcycles	2,687
farm trucks (over 12,000 GVW)	157
farm trucks ( $\leq$ 12,000 GVW)	112
new vehicles	1,275
total	4,231

TABLE X.B.4

*Unregistered vehicles* Law enforcement agencies conducted random roadblock surveys in 1992. The number of unregistered vehicles or vehicles with expired registrations in Davis County is unknown. A data summary of the 1992 survey is provided below.

1992 REGISTERED AND UNREGISTERED VEHICLE DATA  
(Utah Highway Patrol and Motor Vehicle Customer Service Division data)

County	Vehicles Registered	Registration Citations	Registration Warnings
Davis	126,013	1,507	375

TABLE X.B.5

*Roadside I/M program element* The Davis County I/M ordinance requires that vehicles available for rent or use in Davis County are subject to its I/M program. To the extent practicable, all vehicles principally-operated in the county are subject to the I/M program.

## 6. Test procedures and standards

*Specifications* Detailed specifications for the I/M test procedures and standards are described in the Davis County I/M ordinance provided in Section X, Part B, Appendices. The UTAH91 Analyzer specifications are provided in Section X, Part A, Appendices. The IM240 test will be compliant with EPA-AA-RSPD-IM-96-1 provided in Section X, Part A, Appendices. Specifications for the test procedure and equipment for the Basic I/M program were developed according to good engineering practices to ensure test accuracy. Specifications for the test procedure and equipment for the Enhanced (DC98) I/M program are being developed according to good engineering practices to ensure test accuracy and will be finalized in time to support the January 1, 1998 program implementation.

*Basic I/M Program test procedure and analyzer* Davis County's Basic I/M program uses EPA's PRECONDITIONED TWO SPEED IDLE TEST as specified in EPA-AA-TSS-I/M-90-3 March

1990, Technical Report, "Recommended I/M Short Test Procedures for the 1990's: Six Alternatives." All Basic emissions inspections are performed using the UTAH91 Analyzer, a BAR90-type emissions analyzer. The UTAH91 Analyzer calibration specifications and emissions test procedures meet the minimum standards established in Appendix A of the EPA's I/M Guidance Program Requirements, 40 CFR Part 51 Subpart S. Covered vehicles are defined in X.B.5. All covered vehicles in Davis County are subject to the Basic I/M test procedure and inspected using the UTAH91 analyzer as specified in Section X, Part A, Appendices.

*Enhanced I/M (DC98) test procedure and analyzers* A major component of the DC98 program will be to identify vehicle model years most likely to be high emitters of oxides of nitrogen (NO<sub>x</sub>) and hydrocarbons (HC). Davis County estimates that the selected model years will include between 40,000 and 45,000 vehicles. The selected model years will be tested using IM240 at Davis County's centralized facility in accordance with EPA-AA-RSPD-IM-96-1. The IM240 test will be for pass/fail for these vehicles. Davis County will also interrogate vehicles with On Board Diagnostics II (OBD II) capability at its centralized facility. Once a vehicle passes an IM240 test, it may be inspected for 2 -3 years at one of the decentralized, DC98 I/M facilities. The decentralized, DC98 I/M facilities will use a two-speed idle test using an enhanced UTAH91 Analyzer, a BAR90-type emissions analyzer. The Enhanced UTAH91 Analyzer calibration specifications and emissions test procedures meet the minimum standards established in Appendix A of 40 CFR Part 51 Subpart S. Gas cap and EGR valve function tests will be included in the DC98 program.

Covered vehicles are defined in Section X.B.5. Until January 1, 1998, all covered vehicles in Davis County are subject to the Basic test procedure and inspected using the UTAH91 analyzer as specified in this section. On January 1, 1998, all covered vehicles will be tested using IM240 or an Enhanced Basic test procedure under Davis County's DC98 program as designated by county ordinance. Vehicles subject to the Enhanced Basic program will be inspected using the Enhanced UTAH91 analyzer as specified in this section.

*Pre-inspection emissions-related repairs* Inspectors in the Davis County test-and-repair network are required to perform the emissions test prior to making any emissions-related repairs when a vehicle is presented for an emissions inspection.

*Safety issues* Vehicles presented in unsafe condition must be repaired before inspection. Vehicles are also subject to an annual safety inspection administered by the Highway Patrol. Submission of proof of compliance with the safety program is also required as a condition for registration or renewal of registration. Most owners in Davis County's test-and-repair network have the safety and emissions inspection performed at the same time as the emissions inspection. Data relative to the safety inspection can be recorded in the UTAH91 Analyzer. The Davis County I/M program is administered with close cooperation with the Utah Highway Patrol Safety Program. The IM240 program equipment, including dynamometers, shall be operated in accordance with manufacturer's specifications and EPA-AA-RSPD-IM-96-1 to prevent injury or damage to people or equipment.

*Exhaust leaks* The UTAH91 analyzer measures exhaust carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>). Exhaust CO + CO<sub>2</sub> readings of less than 6% indicate a leaky exhaust system and cause the UTAH91 analyzer to abort the inspection. See section 3.3.30C of the UTAH91 analyzer specifications in Appendices of Section X, Part A.

*Emission standards* Davis County's I/M ordinance includes hydrocarbon (HC), oxide of nitrogen (NO<sub>x</sub>) and carbon monoxide (CO) emission standards in an appendix to allow for quick adjustment of the standards in case actual failure rates fall below the level specified in the State Implementation Plan. Only vehicles tested using IM240 will be tested for NO<sub>x</sub>. Vehicles must pass HC, NO<sub>x</sub> and CO emission standards, as applicable. The emission standards for the Basic I/M and DC98 programs were used in the MOBILE5.a and MOBILE5.a.h modeling that was conducted to demonstrate compliance with the respective I/M performance standards.

*Stringency* The Davis County I/M program will adjust its tailpipe emission standards as necessary to maintain a stringency rate of at least 22% for pre-81 model year vehicles, the stringency rate used in the Basic I/M performance standard modeling demonstration.

*Re-test standards* The same test procedure and emission standards are used for initial tests and retests, regardless of which part a vehicle may have failed during an initial test. The UTAH91 and DC98 test procedure requires an official test, once initiated, to be performed in its entirety regardless of intermediate outcomes, except in the case of invalid test conditions, unsafe conditions, or the fast pass/fail algorithms.

*Anti-tampering provisions* The Davis County I/M program requires a visual emissions control device inspection to determine whether the air system, catalyst, fuel inlet, exhaust gas recirculation (EGR) valve, evaporative system, positive pressure crankcase valve (PCV), and gas cap are present, appear to be properly connected, and appear to be the correct type for the certified vehicle configuration. Regardless of the vehicle model year, Davis County does not allow waivers for tampered vehicles or money spent to repair tampered or missing emission control devices to be applied towards a minimum waiver cost. Davis County requires repair of any tampering on model year 1984 and newer vehicles including repair of any tampering of the air system, catalyst, fuel inlet, exhaust gas recirculation (EGR) valve, evaporative system, positive pressure crankcase valve (PCV) and gas cap. The catalytic convertor must be replaced on vehicles that fail due to a tampered fuel inlet restrictor.

*Engine changes* After an engine change, vehicles are tested to the tailpipe emission standards and anti-tampering requirements applicable to vehicles of the chassis model year. Mixing vehicle classes (e.g., light-duty with heavy-duty) and certification types (e.g. California with federal) within a single vehicle is considered tampering.

*Fuel switching* Vehicles that are switched to a fuel type for which there is no certified configuration are tested according to the most stringent emission standards for that vehicle model year and vehicle type.

## **7. Test Equipment**

*Specifications* Written technical specifications for the UTAH91 Analyzer, a BAR90-type computerized emissions analyzer, are provided in Appendix 10. The DC98 IM240 test equipment will be compliant with EPA-AA-RSPD-IM-96-1. Detailed specifications for the DC98 test equipment will be developed in time to support the January 1, 1998 program implementation date.

*UTAH91 analyzer access restrictions* An inspector access code is required to use the UTAH91 analyzer for official tests, a service access code to repair or service the analyzer, and an auditor access code to access the audit functions. DOS functions are not accessible to station owners, inspectors, or analyzer service personnel. Programming changes are made by county I/M auditors from disks supplied by the analyzer manufacturer.

*UTAH91 data security provisions* Manual data entry is minimized. For initial inspections, the inspector enters vehicle registration and vehicle information from the keyboard. Data elements are described in the UTAH91 analyzer specifications. For retests, the inspector calls up the initial test file, compares the vehicle and owner data, and confirms the VIN and license plate data. Data regarding inspections, analyzer calibration and service, lock-out activities, and audit information are stored to a secured disk drive and retrieved by county auditors at least once a month.

*UTAH91 automated test procedure* The UTAH91 analyzer automatically reads all test measurements, records test results in the computer database, determines whether the vehicle has passed or failed a test, and prints vehicle inspection reports and inspection certificates for all subject vehicles. The analyzers are capable of simultaneously sampling dual exhaust vehicles. The analyzer bench includes two non-dispersive infrared (NDIR) analyzers for carbon monoxide, carbon dioxide, and hydrocarbon measurements (one low range and one high range), and one NDIR analyzer for carbon dioxide measurement. The test procedure is automated to the highest degree practical to minimize the potential for intentional fraud and/or human error.

*UTAH91 security lockouts* The analyzers are programmed to trigger lock-outs when abuse or tampering occur. Lock-outs occur after any security system is tampered, failure to conduct or pass periodic calibration tests, or the data recording medium is full. The analyzer can not be used until the lock-out has been cleared by a Davis County I/M auditor. The analyzer automatically keeps an electronic record of all lock-outs including the date of the lock-out, the reason for the lock-out, and the date and person that cleared the lock-out.

*UTAH91 certified analyzer use restriction* Since September 1, 1991, the Basic I/M program has required that official emissions tests be conducted only on registered and certified UTAH91 analyzers. A description of the certification procedure is provided in Appendices of Section X, Part A. There have been several updates of the UTAH91 Analyzer specifications to date and more will follow, as necessary, to accommodate new technology vehicles and changes to the program.

## **8. Quality Control**

*General quality control specifications* The UTAH91 Analyzer specifications and Davis County I/M Program ordinance were carefully designed to insure that emission measurement equipment is calibrated and maintained properly, and that inspection, calibration records, and maintenance records are accurately created, recorded, and maintained. The specifications meet the test equipment quality assurance practices described in 40 CFR 51 Subpart S Sec. 51.359 and Appendix A.

*UTAH91 automatic electronic quality assurance features* Operational analyzer quality assurance measures such as analyzer calibration, zero and span check, hydrocarbon hang-up check, and leak check are mandatory automatic analyzer capabilities. Gas accuracy tolerances, dilution limits, analyzer warm up requirements, system response time requirements, optical correction factors, and interference effects are also addressed in the analyzer specifications. If the checks are not performed on schedule or identify measurements outside of acceptable limits established in the specifications, a lock-out occurs preventing use of the analyzer until such problems are corrected. See Sections 2.12, 2.13, and 2.18 of the UTAH91 Analyzer specifications. Records of all quality assurance activities with respect to the analyzer are automatically recorded in the analyzer's electronic database and evaluated by Davis County I/M auditors on a regular basis. Section 1.7 discusses requirements for assurance that unauthorized access to the I/M database in the analyzer is prevented. Attempts to deliberately avoid or defeat analyzer or inspection quality assurance provisions result in disciplinary action against the I/M mechanic and/or station.

*UTAH91 analyzer maintenance* Section 1.8 of the UTAH91 Analyzer specifications describes required services, warranty provisions, and documentation that analyzer manufacturers must provide to customers. It includes ensuring that the analyzer meets the quality assurance specifications at the time of delivery, that routine quarterly preventative maintenance is performed, training on how to use, maintain, and operate the analyzer is provided by the manufacturer, and that if repair of defects can not be made promptly a temporary analyzer replacement is provided. Service activities are recorded in the analyzer's electronic database. Davis County has conducted a survey of analyzer owners to determine compliance with these provisions. Failure of an analyzer manufacturer to meet quality assurance specifications could result in de-certification of that manufacturer's product for use in Davis County.

*UTAH91 document security* Document security was a high priority during the UTAH91 analyzer design phase. The analyzer tracks the unique certificate numbers and ensures that the certificate printed matches the test number. Missing certificate numbers are stored in the analyzer database for auditor review. The certificates are printed on a dedicated and locked printer. Only permitted inspectors have access to the certificate printer and storage area. Access to the certificates is only possible for the purpose of loading or aligning certificates in the printer. Attempts to access this area at other times or without an access code sets a lock-out that only Davis County auditors can clear. The certificate storage area is designed with redundant security systems including both hardware and software locks. See Section 2.16 of the UTAH91 analyzer specifications. The blank certificates are commercially printed with sequential and unique serial numbers on counterfeit-resistant security paper.



*UTAH91 analyzer certification* Sound engineering practices were followed during the design and certification of the UTAH91 analyzer to insure accurate and repeatable inspections under a range of environmental conditions. Manufacturer owner's manuals, operating instructions, and warranty provisions were also reviewed during the certification process. Comprehensive records of the certification process have been maintained.

*General UTAH91 analyzer security provisions* The Davis County I/M ordinance requires use of a certified and registered UTAH91 analyzer for official inspections at the decentralized facilities. Inspection records include the analyzer registration number. The ordinance makes it illegal to alter analyzer software or hardware without written approval. Analyzer calibration requirements, maintenance, and warranty provisions are also specified in the Davis County I/M ordinance. A copy is provided in the Section X, Part A, Appendices.

## **9.     Waivers**

*Waiver rate* Davis County will take corrective action as needed to maintain a maximum waiver rate of 1% of the initially failed vehicles or the Utah Air Quality Board will revise the SIP and emission reductions claimed based on the actual waiver rate. The conditions for issuing waivers are legally authorized and specified in the Davis County I/M ordinance to meet the minimum waiver issuance criteria specified in 40 CFR Subpart S 51.360.

*Waiver procedures* The Vehicle Inspection Report (VIR), printed after each inspection and provided to the vehicle owner/operator, includes warranty and waiver information, if the vehicle failed the emissions inspection. A waiver document may be issued only by Davis County I/M technical center staff and only after verification of required documentation. Any tampered, missing, or inoperable emission control devices must have been replaced or repaired. At least \$100 for 1968 through 1980 model year vehicles and \$200 for 1981 and newer model year vehicles must have been spent on acceptable emission repairs as verified by a Davis County I/M program auditor by physical examination of the vehicle and review of the repair documentation. Repair documentation, such as receipts, are copied and retained by auditor to prevent reuse. Repairs made by a permitted I/M inspector include the cost of labor. The retest must reflect a reduction of carbon monoxide, oxides of nitrogen (for IM240 only) and/or hydrocarbon emissions after repairs. Vehicles still under the federal emissions warranty are not eligible for a waiver until all warranties are exhausted. Under IM240, vehicles displaying an OBD II fault code should be repaired before a waiver can be issued for the vehicle. Warranted repair and tampering repair may not be applied to the repair cost waiver limits. Waivers are only valid for one test cycle. The vehicle owner surrenders the original waiver document at the time of registration; copies are not accepted for registration purposes. Specific provisions regarding waivers may be found in the Davis County I/M ordinance and the Utah Tax Commission Division of Motor Vehicle policy manual which is available upon request. The I/M program does not provide for time extensions to relieve economic hardships in obtaining emission-related repairs.

## **10.    Motorist compliance enforcement**

*Registration denial* Davis County's I/M program is enforced by means of registration denial. Vehicle owners must present proof of compliance with the I/M program, a waiver, or evidence of exemption from the I/M program as a condition precedent to vehicle registration or registration renewal. See Section X, Parts E and G for a more detailed discussion of inspection frequency, inspection scheduling, license plate requirements, and enforcement of the registration requirements. Citations are routinely issued to operators of vehicles with expired or missing license plates during routine traffic stops, parking lot inspections, and roadblocks. As specified in Section 41-1a-1303 (Section X, Part A, Appendices), driving without registration is a Class C misdemeanor. The penalty for a Class C misdemeanor is imprisonment of no more than 90 days and \$750 for persons or up to \$1000 for corporations, associations, partnerships, or government instrumentalities. In addition to paying a fine, the motorist must register the vehicle. It is currently a Class B misdemeanor to violate a county I/M ordinance. The penalty for a Class B misdemeanor is an imprisonment not exceeding six months and for persons a fine of up to \$1000 or for corporations, associations, partnerships, or government instrumentalities a fine of up to \$5000. Copies of the relevant statute are provided in Section X, Part A, Appendices. In Utah, the magnitude of such penalties is a judicial rather than an administrative decision. Per Section 41-1a-1315 falsification of evidences of title and registration is a second degree felony.

*Certificate of Compliance* The Certificate of Compliance is dated by the UTAH91 or DC98 analyzer immediately after a passing inspection is completed. The certificate is only valid for registration purposes for two months. At the same time the analyzer also prints the following information on the certificate to ensure unambiguous vehicle identification: the vehicle identification number (VIN), license number, model year, make, and model. A sample of the Certificate of Compliance is in Appendix C of the UTAH91 specifications. The certificates are only printed in the event that the vehicle passed the emissions inspection. Separate documentation, including the same vehicle information, is used for waivers.

*Fuel changes to non-subject status* Vehicle changes that would result in registration changes from a subject to exempt status require physical confirmation by Davis County I/M program personnel at the I/M technical center. Falsification of registration or title information is a felony offense.

*Title transfers* Proof of compliance with the I/M program is required for a title transfer. The system ensures that owners are not able to avoid the program by extending the inspection date through manipulation of the title and registration system.

Davis County I/M program staff, peace officers, and Utah Tax Commission's Motor Vehicle Customer Service Division routinely work together to ensure that motor vehicle owners that move into an I/M program area complete registration transfer including compliance with the I/M program. Except for higher education students and active duty military personnel, people are required to register their vehicles in the county in which they are domiciled. As discussed in the Vehicle Coverage section, although these two exempted classes of vehicle owners do not have to register their vehicles in Utah, they do have to comply with the I/M programs. Employment

status, maintenance of a residence, enrollment of children in local schools, and voting districts are considered when identifying persons in violation of this requirement.

The I/M program staff work with citizens, the Motor Vehicle Customer Service Division and county attorneys to identify and prosecute people that illegally transfer registration to a non-subject area to avoid the I/M program. The process is very labor intensive. There are many legitimate reasons to be operating a vehicle in an I/M program area that is registered elsewhere. Violators must be dealt with on a case-by-case basis. Persons caught to date have been subject to fines of around \$700. Those prosecuted and convicted could end up with a criminal record and actual jail time. Fraudulent registration of a motor vehicle is a felony offense. Most people confronted with evidence of their guilt and the seriousness of their offense, to date, have complied promptly. The involved agencies are developing more efficient methods of dealing with illegal registrations that result in exemption from the I/M programs.

Davis County is committed to a cooperative aggressive effort to ensure that vehicles operated in the county comply with the I/M program to ensure a compliance rate of at least 96%.

## **11. Motorist compliance enforcement program oversight**

*Utah Tax Commission, tax assessors, and county roles* The Utah Tax Commission Motor Vehicle Customer Service Division and Davis County tax assessor deny applications for vehicle registration or renewal of registration without submittal of a valid certificate of compliance, waiver, or verified evidence of exemption. Proof is retained by the tax clerk, micro-photo-copied, and then destroyed. Altered or hand-written documents are not accepted. All certificate data is collected by Davis County I/M program auditors and subjected to scrutiny for evidence of any improprieties.

*Database quality assurance* The vehicle registration database is maintained and quality assured by the Motor Vehicle Customer Service Division. The I/M inspection database is maintained and quality assured by the Davis County I/M program staff. The Davis County I/M program has access to the Motor Vehicle Customer Service Division database and utilizes it for quality assurance purposes. The databases are subject to regular auditing, cross-referencing, and analysis. The databases are also evaluated using data obtained during roadblocks and parking lot surveys. Evidence of program effectiveness problems trigger additional joint enforcement activities.

*Oversight provisions* The oversight program includes verification of exempt vehicle status through inspection, data accuracy through automatic and redundant data entry for most data elements, an audit trail for program documentation to ensure control and tracking of enforcement documents, identification and verification of exemption-triggering changes in registration data, and regular audits of I/M inspection records, I/M program databases, and the Motor Vehicle Customer Service Division database.

*Enforcement staff quality assurance* Davis County I/M program auditors and tax clerks involved in vehicle registration are subject to regular performance audits by their supervisors. All enforcement personnel (direct and indirect) involved in the motorist enforcement program are subject to disciplinary action, additional training, and termination for deviation from procedures. Specific provisions are outlined in the Motor Vehicle Customer Service Division procedures manual which is available upon request, the Davis County I/M audit policy documents provided in Davis County I/M ordinance provided in Section X, Part A, Appendices.

*Co-operative enforcement oversight effort* The Motor Vehicle Customer Service Division, Utah Division of Air Quality, Utah Highway Patrol and Davis County I/M program staff meet at least once a month to ensure on-going high quality oversight of joint motorist compliance programs. EPA audit of this process is authorized if measures to protect tax-payer confidentiality acceptable to Motor Vehicle Customer Service Division are exercised.

## **12. I/M Program quality assurance**

*Station/inspector audits* Davis County regularly audits all permitted I/M inspectors and stations to ensure compliance with the county I/M ordinance and policies. Particular attention is given to identifying and correcting any fraud or incompetence with respect to vehicle emissions inspections. Compliance with record keeping, document security, analyzer maintenance, and program security requirements are scrutinized. The inspector's skill level is also evaluated during audits. Another major purpose of the audits is to retrain inspectors, as necessary, as soon as problems are identified. Documentation sufficient to support a legal case to suspend or revoke a permit is also collected in the event of serious and/or repeated violations. Most stations and inspectors are audited every month and all at least quarterly.

*Covert audits* Davis County, to the extent possible, performs a covert audit of each inspector and station at least once a year. The number of covert audits at least equals the number of permitted inspectors. Covert audits are performed using a variety of vehicles that are representative of the subject fleet that are set to fail across a full range of malfunctions. Suspected problem stations and inspectors are targeted for earlier and more frequent audits. Complaints also trigger additional audits.

Covert performance audits shall include:

Remote visual observation of inspector performance, which may include the use of aids such as binoculars or video cameras, at least once per year per inspector in high-volume stations (i.e., those performing more than 4000 tests per year);

Site visits at least once per year per number of permitted inspectors (per inspector FTE) using covert vehicles set to fail (this requirement sets a minimum level of activity not a requirement that each inspector be involved in a covert audit); and

For stations that conduct both testing and repairs, at least one covert vehicle visit per station per year including purchase of repairs and subsequent retesting if the vehicle is initially failed for tailpipe emissions.

*Electronic audit capabilities* The Davis County I/M program equipment perform various analyses to identify statistically inconsistent data indicative of problem stations and inspectors. Overt audit records are maintained electronically in the analyzer. After overt audits, the auditor retrieves the data on the analyzer diskette containing the audit, vehicle inspection, and analyzer service, maintenance, and calibration records dating back to the previous audit. The data from each audit is added to the comprehensive central Davis County I/M database. Further analysis of the central database results in identification of stations and inspectors for which additional audits are performed.

*Auditor quality assurance* Auditors receive 24 hours of formal classroom instruction and are provided on-the-job training in: the use of the UTAH91 analyzer; the Davis County I/M program ordinance; basic air pollution control; basic principles of emissions-related motor vehicle engine repair; emission control systems; evidence gathering; administrative procedures and laws; quality assurance practices; and covert audit procedures. Davis County sends auditors to additional automotive emissions-related training and meetings on a regular basis. Auditor supervisors audit the I/M program auditors by reviewing their documentation and also auditing a number of their stations at least once every year.

*Written audit procedures* Copies of Davis County's I/M program overt and covert audit procedures are provided in Section X, Part B, Appendices. A detailed description of the audit capabilities of the UTAH91 analyzer is found in Section 3.9 of the UTAH91 analyzer specifications. It is anticipated that the DC98 Enhanced I/M program written audit procedures and analyzer's automatic audit capabilities will be substantially similar to the UTAH91 program.

### **13. Enforcement against stations and inspectors**

*General enforcement provisions* The Davis County I/M program is responsible for enforcement action against incompetent or dishonest stations and inspectors. The Davis County I/M ordinance includes a penalty schedule. For serious or repeated offenses, auditors are authorized to immediately suspend the station or inspector by locking out their UTAH91 analyzer(s). The county does not have legal authority to impose direct fines on stations or inspectors, but suspension or revocation of a station permit results in a substantial loss of income that is far in excess of \$100 fine suggested by the EPA guidance. The county can negotiate a fee settlement rather than a station suspension. Fee settlements are at least as much the station's anticipated income for emissions testing for the time during which the station would be suspended. A station permit may be suspended or revoked even if the owner/operator had no direct knowledge of the violation. In the case of incompetence, re-training is required before the permit is restored.

Davis County revised its penalty schedules to comply with the more stringent specifications included in 40 CFR 51.364. The Utah Air Quality Board adopted the revised penalty schedule for

Davis County into Appendices of Section X, Part B, on January 30, 1995. At a minimum, inspector and station permit suspension shall be imposed for at least 6 months (or a fee retainage or settlement penalty equivalent to the inspector's salary for that period) whenever a vehicle is intentionally improperly passed for any portion of the required test.

*Suspension and revocation* Suspension or revocation effectively bars an individual from further inspections because the auditor removes the inspector's authorization code from the UTAH91 analyzer. Evidence of indirect participation in emissions inspections by an individual while suspended or revoked would result in legal action against the station. If the station is suspended or revoked the analyzer is totally locked-out. The analyzers are initialized by an auditor for use at a single permitted station and only by inspectors permitted for that station. A record of the serial numbers of all registered analyzers and their locations is maintained by Davis County.

*Enforcement records* Davis County keeps comprehensive records of all audit activities, warnings, suspensions, and revocations and report enforcement activity statistics to the EPA and the executive secretary on an annual basis.

#### **14. Data collection**

*UTAH91 analyzer inspection data* The UTAH91 analyzer creates a detailed record of each emissions inspection performed including, but not limited to the following data, for each vehicle tested: test record number; inspection station number; inspector number; test system number; date of the test; emission test start time; the time final emission scores are determined; vehicle identification number (VIN); license plate number; test certificate number; gross vehicle weight rating (GVWR); model year, make, and type of vehicle; number of cylinders or engine displacement; transmission type; odometer reading; category of test performed (i.e., initial, first retest, or subsequent retest); fuel type of the vehicle; emission scores for HC, CO, and CO<sub>2</sub> at idle and 2500 RPM; and results (pass/fail/not applicable) for visual inspection of the catalytic convertor, air system, gas cap, evaporative system, positive crankcase (PCV) valve; and the fuel inlet restrictor. The tailpipe emission standards for each type of vehicle is included in a look-up table in the UTAH91 analyzer. The UTAH91 analyzer automatically uses the appropriate standards for the type of vehicle being tested and makes a pass/fail determination. The inspection data is recorded by the UTAH91 analyzer during the inspection procedure.

*IM240 inspection data* The IM240 inspection data will include the UTAH91 analyzer inspection data modified to be in compliance with EPA-AA-RSPD-IM-96-1. Detailed Davis County IM240 inspection data parameters will be developed in time to support the January 1, 1998, DC98 program implementation.

*UTAH91 analyzer quality assurance data* Quality assurance data including a detailed history of all calibration (including the concentration values of the calibration gases), service, lockout, and document security events are also recorded and maintained by the UTAH91 analyzer. Each UTAH91 record includes, as applicable, the station number, mechanic access number, auditor access number, service access number, analyzer serial number, date, and activity time.

*IM240 quality assurance data* The IM240 quality assurance data will include the UTAH91 analyzer inspection data modified to be in compliance with EPA-AA-RSPD-IM-96-1. Detailed Davis County IM240 quality assurance data parameters will be developed in time to support the January 1, 1998, DC98 program implementation.

*UTAH91 analyzer database specifications* The programming criteria for the analyzer database is described in Section 3 of the UTAH91 analyzer specifications. Appendix F of the UTAH91 analyzer specifications contains a complete description of the electronic data records. The data disk containing inspection and quality assurance information is removed from the UTAH91 analyzer by an auditor at least once a month during overt audits and maintained permanently in the county's central I/M database.

*DC98 data collection* The DC98 data collection system will meet the requirements specified under 40 CFR 51.365 and be substantially similar to the UTAH91 Basic I/M program data collection system. Detailed Davis County DC98 database specifications will be developed in time to support the January 1, 1998, DC98 program implementation.

## **15. Data analysis and reporting**

*Annual* Davis County shall analyze I/M program data and submit annual reports to the U.S. Environmental Protection Agency and the executive secretary upon request. Beginning in July of 1995, Davis County will submit to EPA and the executive secretary an annual report, for January through December of the previous year, which provides statistics on the testing, quality assurance, and enforcement activities of its I/M program. At a minimum the annual reports will include all of the data elements listed 40 CFR Subpart S 51.366.

*Biennial* Beginning in July of 1996, and biennially thereafter, the Davis County shall submit a report to EPA and the executive secretary discussing all changes made in the program design, funding, personnel levels, procedures, regulations, and legal authority. The report will also supply a detailed discussion of the impact of such changes upon the program, any weaknesses or problems discovered in the program over the previous two-year period, the steps that were taken to address those problems, the result of those corrective actions, and any future efforts planned.

## **16. Inspector training and permitting**

*Inspector permitting and initial training* No person may conduct an official I/M inspection unless they are permitted. Davis County requires formal training prior to permitting inspectors. Each class includes at least the following information: the causes and effects of air pollution; the purpose, function, and goal of the I/M program; I/M inspection ordinances, policies, and procedures; technical details of the test procedures and the rationale for their design; emission control device function, configuration, and maintenance; quality control procedures and their purposes; public relations; and safety and health issues related to the I/M inspection process. Weber State University teaches an inspector training class on a contract basis for Davis County. Davis County regularly monitors and evaluates Weber State University's inspector training

program delivery. Inspector candidates will not be issued a permit unless they have passed a written test with at least 80% (or lower if an occupational analysis justifies it) correct responses and a hands-on test during which the trainee demonstrates the ability to properly conduct all test procedures, calibrate the analyzer, properly utilize equipment, and to follow other I/M program requirements. The county will take appropriate steps to insure the security of the testing process.

*Basic inspector permit renewal* Inspector permits are valid for a period of one year, at which point refresher training and testing, are required prior to permit renewal. An auditor enters the inspector's permit expiration date in the analyzer(s) that the inspector is authorized to use. Starting 60 days prior to the inspector's permit expiration date the analyzer displays the message "Your mechanic permit expires MM/DD/YY". The analyzer locks-out inspectors that attempt to use the analyzer after their permit expires and displays the following message. "Your mechanic permit expired (date). You are not authorized to perform any emissions inspections at this time. Please contact your local I/M office." Auditors will not clear the lock-out until the inspector has renewed the permit. Davis County may require evidence of more comprehensive emissions-related automotive training as a prerequisite to inspector permit renewal.

*Inspector permit suspension and revocation* A determination of inspector incompetence or failure to comply with I/M program requirements may result in suspension or revocation or an inspector's permit prior to the annual expiration date. A permit to conduct I/M inspections is not a legal right but rather a privilege bestowed by Davis County and is conditional upon adherence to its I/M program requirements.

*Inspector training authority and materials* Authority to require mandatory I/M inspector training is established and described in the Davis County I/M ordinance. A description of the I/M inspector training programs and the written and hands-on tests is provided in Section X, Part B, Appendices.

## **17. Public information and consumer protection**

*General public information* Davis County, along with the Utah Department of Environmental Quality, provides a comprehensive public education and protection program including strategies to educate the public on: Utah's air quality problems; ways that people can reduce emissions; the requirements of state and federal law; the role of motor vehicles in the air quality problem; the need for and benefits of a vehicle emissions inspection program; ways to operate and maintain a vehicle in a low-emission condition; how to find a qualified repair technician; and the requirements of the I/M program. Information is provided via direct response to inquiries for information, reports, classes, pamphlets, fairs, school presentations, workshops, news releases, posters, signs, and public meetings.

*Davis County I/M technical center* Davis County operates an I/M technical center staffed with trained auditors and capable of performing emissions tests. A major function of the I/M technical center is to serve as a referee station to resolve conflicts between permitted I/M inspectors, stations, and motorists. Auditors actively protect consumers against fraud and abuse by



inspectors, mechanics, and others involved in the I/M program. Complaints made on a confidential basis are investigated and resolved in a manner that conceals the person's identity to ensure protection of whistle blowers. Auditors advise motorists regarding emissions warranty provisions and assist the owners in obtaining warranty-covered repairs for eligible vehicles. Applications for waivers are evaluated by auditors at the I/M technical center and issued only after visual verification that all the requirements for a waiver have been met. The I/M technical center also provides motorists with information regarding the I/M program, general air pollution issues, and emissions-related automotive repairs.

*Vehicle inspection report* A vehicle inspection report (VIR) is printed and provided to the motorist after each vehicle inspection. The VIR includes a public awareness statement about automotive emissions and lists additional ways that the public can reduce air pollution. The test results are detailed on the VIR. Information about vehicle emissions warranties and the benefits of emissions-related repairs are printed for vehicles that failed the test. Information about waiver requirements and application procedures are printed on the VIR, if the vehicle has failed a retest, including the address and telephone number of the applicable I/M technical center. A complete description of the VIR is included in Appendix E of the UTAH91 analyzer specifications.

*Davis County co-operative public education tools* A variety of pamphlets and radio, television, and newspaper advertisements about automotive air pollution issues are developed and distributed by the Davis County I/M program in cooperation with other I/M counties and the Utah Division of Air Quality. The legislature authorizes funding each year for pass-through money from the state to Davis County for public education to help reduce vehicle emissions.

## **18. Improving repair effectiveness**

*High priority* Davis County, along with the other three Utah I/M counties, initially implemented a major Basic I/M program revision on September 1, 1991. Shortly thereafter, the county I/M managers and the Utah Division of Air Quality staff jointly identified improvement of repair effectiveness as a high priority action item. The Governor's Clean Air Commission also recommended making affordable additional emissions-related training available. Full emission reductions will only be realized if the repair industry is able to competently diagnose and repair emissions-related defects.

*Continuing education* To that end, I/M program managers have worked with Utah's higher education institutions to develop and provide emissions-related automotive technology classes to technicians. Inspectors are also encouraged to take classes offered by trade organizations, automobile manufacturers, and dealers. Davis County's I/M program waives the re-permitting test for inspectors that submit transcripts reflecting that they have taken and passed one of the classes. The permit renewal tests are difficult enough to make this provision a good incentive. The classes are advertised in the Davis County I/M technical bulletins. Appendices for Section X, Part B include descriptions of some of the classes available in the community.

*Pollution prevention* The Utah Department of Environmental Quality Pollution Prevention Program is funding various projects related to pollution control curriculum being developed by the Weber State Automotive Technology department and students.

*I/M program repair support activities* In initiating improved automotive educational opportunities, the counties work on a day-to-day basis to ensure that repair information is available. I/M stations are required to have available up-to-date relevant automotive diagnostic references and tools as a condition for obtaining a permit. Davis County maintains a hot line to its I/M technical center that any mechanic can call for technical assistance related to vehicle inspection, diagnosis, and repair. Technical bulletins are regularly mailed to each permitted inspector with information regarding training schedules, common problems found with particular engine families, and diagnostic tips.

## **19. Basic and DC98 I/M SIP implementation**

As required by 40 CFR Part 51.373(a) the Basic I/M SIP requirements not included in the September 30, 1993, adoption of Section X by the Utah Air Quality Board have been funded and implemented, including but not limited to the covert audits requirements specified in Section X.B.12 and the penalty provisions specified in Section X.B.13. The Utah Air Quality Board adopted the changes into Appendix 6 of Section X on January 30, 1995.

The Basic I/M program health regulations, policies, procedures, and activities specified in this I/M SIP revision have been implemented. The Enhanced DC98 I/M program requirements will be implemented no later than January 1, 1998. Davis County shall continue to implement and operate the I/M program until a maintenance plan, without an I/M program, is approved by EPA in accordance with Section 175 of the Clean Air Act as amended.